THE UNDER SECRETARY OF DEFENSE
3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

ACQUISITION,
TECHNOLOGY
AND LOGISTICS

JUL 7 2004

The Honorable Ted Stevens
Chairman, Subcommittee on Defense
Committee on Appropriations
United States Senate
Washington, DC 20510-6028

Dear Mr. Chairman:

The Department respectfully submits this report on plans to address perchlorate at Base Realignment and Closure (BRAC) properties, as requested in the Conference Report to accompany the Military Construction Appropriations Act for Fiscal Year 2004 (H. Rpt. 108 – 342). The plans to address perchlorate at BRAC properties reflect the consistent approach to identify and address, where appropriate, perchlorate releases from uses by the Department. This letter provides a summary of the Department's plans to address perchlorate at BRAC properties within the established remediation action plan.

The Department's efforts to address perchlorate reflect the Department's continuing commitment to the protection of public health. The Department has already taken significant steps to identify the impacts posed by perchlorate, including investment in science which may be used in the future in the formulation of protective health values, funding and testing new technologies to remove perchlorate, and searching for possible substitutes for perchlorate.

The Department adopted a perchlorate sampling policy in September 2003 that includes sampling on BRAC properties. The policy requires the Services to sample for perchlorate where there is a reasonable basis to suspect that a perchlorate release has occurred as a result of DoD activities and there is complete human exposure pathway.

At sites where no applicable regulatory values for chemicals exist, such as is the case for perchlorate, the Department conducts site-specific risk assessments based on EPA published toxicity factors to establish acceptable exposure levels for a site. In the absence of a Maximum Contaminant Level or toxicity factors for perchlorate, it may be appropriate for remediation managers to carefully consider a number of factors including risk, uncertainties, cost and, technical feasibility in determining what action to take.

Upon the establishment of applicable regulatory values for perchlorate, the Department commits to integrating perchlorate remediation into the established remediation program for BRAC properties. Perchlorate data gathered under the sampling plan, and other site-specific information, forms the foundation for the Department's remediation efforts. Remediation plans to address actionable levels of perchlorate contamination will be developed and integrated in the existing prioritization process for the cleanup of BRAC properties. In the absence of a regulatory value, DoD has and will continue to act to address perchlorate contamination found by the Department to present an unacceptable risk to public health or the environment using available sampling data in combination with site-specific risk assessments and related information. Such responses will occur on a case-by-case basis, reflecting individual circumstances of sites where perchlorate contamination is found.

The enclosed table details the most current data on BRAC properties with identified perchlorate levels, listed by Service and location. Data on these properties includes the environmental media tested, the range of concentrations of perchlorate found, sampling notes, analytical methods applied, potential sources (if known), and the status of follow-on actions or additional site-specific information, where appropriate. The Department included such data as the range of perchlorate concentrations, the number of samples with perchlorate detected, and the size of the sampling effort. To ensure consistency, the range of perchlorate concentrations reflects the number of samples with no detection of perchlorate (referred to as non-detects) using approved analytical methods. We submit this information in the provided table to best consolidate our most current information on our BRAC properties.

The Department will continue to work with stakeholders to develop science-based decisions regarding perchlorate assessment and eventual cleanup. In California, for example, we formed an ad hoc working group with California regulatory officials to jointly prioritize sampling activities in that state. We have also implemented Department-wide policy, the Munitions Action Plan, directing that components assess hazards of off-range migration of munitions constituents, including perchlorate, in their range assessments. The Department's goal has been and continues to be strong support of a national process leading to understanding and mitigation of risks from perchlorate. The Department, along with other Federal agencies, supports an independent review of the perchlorate science by the National Academy of Sciences.

The Department remains committed to the protection of human health and the environment. My point of contact for the BRAC perchlorate data should you need further clarification is Ms. Shannon Cunniff, at 703-604-1529.

A copy of this report has been provided to the appropriate congressional defense committees.

Sincerely,

Michael W. Wynne
Acting

Enclosure:
As stated

cc:
The Honorable Daniel K. Inouye
Ranking Member

Department of Defense BRAC Installations with Perchlorate Detection Data Collected by April 2004

	Installation	State	Exposure Pathway	Range of Concentrations (ppb)	Sampling Notes	Sources/Remediation Plans
Army	Fort McClellan	AL	Soil Ground Water Surface Water	Non-detect – 32 1.2 – 2.55 2.66	Soil - 2 detections / 182 samples Ground Water - 4 detections / 38 samples Surface water - 1 detection / 41 samples Subsurface soil detection- 0 detections /162 samples Sediment – 0 detections. 39 samples using EPA Method 314 * (refer to notes)	Potential source - munitions containing perchlorate during range operations. All 7 detections of the 261 samples analyzed were below the Method Reporting Limit (MRL) (refer to notes) set for the analytical method therefore no further action planned.
	Fort Ord	CA	Soil	13 – 106	41 detections / 442 samples using EPA Method 314 modified **	Potential source - munitions containing perchlorate during range operations Affected area contained and no migration believed therefore no further action planned. Results of County Unregulated Contaminant Monitoring Rule (UCMR) sampling of water systems surrounding Ft Ord found no detections of perchlorate.
	Pueblo Chemical Depot	CO	Ground Water	Non-Detect – 180	2 detections / 32 samples using EPA Method 314 * Confirmatory re-sampling (0 detections/19 samples) yielded no detections using EPA Method 314 *	Potential source - munitions de-militarization Based on the results of re-sampling, no further action planned.
	Savanna Army Depot	IL	Ground Water	Non-Detect – 12	2 areas sampled: (1) Former Burning grounds: 1 detection/ 11 samples (2) Active demolition area: 7 detections/ 9 samples using Method 314.0 modified ***	Potential source - munitions de-militarization No further action planned until an applicable regulatory standard is established.
	Jefferson Proving Ground	IN	Surface Water Soil	0.87 27 – 110	Ground water – 0 detections/ 14 samples Surface Water – 1 detection/ 22 samples Sediment - 0 detections/ 22 samples Soil – 26 detections/ 160 samples using EPA method 314.0 Modified #	Potential source - munitions containing perchlorate in training operations. Sampling conducted as part of the Army's Range Assessment Program No further action planned until an applicable regulatory standard is established.

Installation	State	Exposure Pathway	Range of Concentrations (ppb)	Sampling Notes	Sources/Remediation Plans
Fort Wingate Depot	NM	Soil Ground Water	Non-Detect – 3,180 Non-Detect – 2,890	4 areas tested: (1). Areas associated with former TNT washout facilities; Soil- 30 detections/ 42 samples (detections up to 3180 ppb detected) Ground water- 16 detections/ 90 samples (2400 & 2890 ppb detected) ** (2). Sewage treatment facility- 0 detections/ 2 samples (3). Closed OB/OD site- 1 detection/ 14 samples (4). Open OB/OD site- 14 detections/ 39 samples using EPA Method 314.0 modified ##	Potential source - munitions de-militarization Future contamination assessment and/or remediation plans are pending issue of the RCRA Post Closure Permit by the State of New Mexico, anticipated in June 2004
Umatilla Chemical Depot	OR	Ground Water	5 – 9.6	5 detections/45 samples using EPA Method 314 *	Potential - munitions de-militarization (Open Burn-Open Detonation Area). Samples analyzed during the 1990-2000 time period. No further action planned until an applicable regulatory standard is established.
Red River Army Depot	TX	Ground Water	6.8	BRAC parcel at sanitary sewer plant: Groundwater-1 detection/ 31 samples Surface water- 0 detections/ 5 samples Sediment- 0 detections/ 5 samples using EPA Method 314.0 *	Potential source unknown. State using Caney Lake as Emergency Feed water for other lakes. State has sampled with the Army and found no perchlorate in the lake. No further action planned until an applicable regulatory standard is established.

	Installation	State	Exposure Pathway	Range of Concentrations (ppb)	Sampling Notes	Sources/Remediation Plans
Navy	Camp Bonneville	WA	Ground Water	5 – 214	6 detections/ 24 samples using EPA method 314.0 modified ###	Potential source - munitions de-militarization Perchlorate is co-mingled with other contaminants and is included in the Contaminants of Concern. EPA has reviewed the management plan discussing Landfill #4 sampling and cleanup and the potential for seeps to enter the nearby Lacamas Creek. Camp Bonneville has begun a soil removal action and has installed monitoring wells between the landfill and the creek to monitor contaminant migration.
	Former Marine Corps Air Station, El Toro	CA	Ground Water	Non-Detect – 398	243 detections/599 samples using EPA Method 314 *, DTSC CLO4METH and EPA 300.0	Potential source unknown. Sites are in RI/FS phase. Perchlorate co-mingled with other contaminants. Further characterization will be performed as necessary to verify sources and exposure. Remedial alternatives will be evaluated in the FSs
	White Oak NSWG	MD	Surface water Ground water Soil	Non-Detect – 11 Non-Detect – 880 Non-Detect –- 1,400	127 detections/1204 samples using EPA Method 300.0 and EPA 314.0 *.	Potential source unknown Perchlorate co-mingled with other contaminants. These are being investigated together and are being/will be remediated together.
Air Force	McClellan Air Force Base	CA	Ground Water	Non-Detect – 15	2 detections in 1 well over many months of sampling using EPA Method 314 *	Potential source unknown Sampling requested by State Regional Water Quality Control Board No further action planned until an applicable regulatory standard is established.
	Mather Air Force Base	CA	Ground Water	Non-Detect –1800	27 detections / 119 samples using EPA Method 314 *	The potential source of the perchlorate is not from Departmental activities, attributed to an identified commercial firm who is conducting remediation.

	Installation	State	Exposure Pathway	Range of Concentrations (ppb)	Sampling Notes	Sources/Remediation Plans
	*Chanute Air Force Base	IL	Ground Water	5	1 detection/1 sample using EPA Method 314.0*	Potential source unknown Follow-up sampling requested by EPA will be conducted by the Air Force and completed in summer 2004.

Note: The Method Reporting Limit or MRL establishes the concentration of the target analyte that the laboratory has demonstrated the ability to measure within specified limits of precision and accuracy during routine laboratory operation conditions. An MRL is the lowest concentration that can be reported with confidence for a specific analytical method for samples from specified environmental media

* The EPA method for perchlorate has MRLs of 40-90ppb in soils and sediment sampling and 4-5 ppb for ground water and surface water sampling.

** The MRL is 10ppb.

*** The MRL is 1ppb

The MRLis 2ppb in ground water and 1ppb in surface water. The application of EPA Method 300.0 has an MRL of 40ppb in sediment and 10ppb in soil.

The MRL is 10ppb for soil and 1ppb for water.

The MRL is 1ppb.